

Abstract

5 The present invention provides a method and circuits for digital demodulation of Phase modulated signals using a direct digital phase digitizer to obtain the instantaneous phases of the modulated signal. Digital signal processing circuits comprising only of registers, adders and subtractors, but not multipliers or dividers, is used to extract the modulating signals from the instantaneous phase information derived from the modulated signal.

10 The invention also shows how the PM demodulator can be extended to perform FM demodulation. The present invention provides a method and circuits for digital demodulation of FM and PM modulated signals. In both cases a direct digital phase digitizer is used to obtain the instantaneous phases of the input signal. Digital signal processing circuits comprising only of registers, adders and subtractors, is used to extract the modulating signals from the instantaneous phase information.